[LJ 0816] AUGUST 2016 **Sub. Code :2442**

B.Sc. PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about Boston Brace.
2. Biomechanics of Knight Taylor Brace.
3. Cervical Halo Brace parts and functions.

II. Write notes on: **(8 x 5 = 40)**

1. Biomechanics of Milwaukee Brace.
2. Explain about Intervertebral Disc.
3. Orthotic Management for Scoliosis.
4. Boston Brace Trimlines.
5. Spinal Orthosis checkout Procedure.
6. Prescription criteria for Thoracolumbosacral Orthosis (TLSO).
7. Draw sketch of a Typical Vertebrae and mention its parts.
8. Corsets Placement and functions.

III. Short answers on: **(10 x 3 = 30)**

1. Soft Cervical Collar Measurement.
2. Knight Taylor Brace Diagram and Parts.
3. Types of Cervical Poster Appliance.
4. What is Kyphosis?
5. How to measure Cobb's Angle?
6. Pelvic Girdle.
7. Cervical Vertebrae.
8. Cow horn brace.
9. Anterior Hyperextension Control Brace.
10. What is Torticollis?

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[LK 0217] FEBRUARY 2017 **Sub. Code :2442**

B.Sc. PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about Cervical two Poster Appliance.
2. Biomechanics of Knight Taylor Brace.
3. Explain about Orthotic Management of Kyphosis.

II. Write notes on: **(8 x 5 = 40)**

1. Explain about Pelvic Girdle.
2. How to measure Cobb's Angle?
3. Explain about Intervertebral Disc.
4. Biomechanics of Cow horn brace.
5. Milwaukee Brace Parts and functions.
6. Explain about Lordosis.
7. Explain briefly about Thoracic Cage.
8. Boston Brace Trim lines.

III. Short answers on: **(10 x 3 = 30)**

1. Corsets Placement and functions.
2. What is Scoliosis?
3. Cervical collar Measurements.
4. Parts of Cervical Halo Brace.
5. Pelvic Girdle.
6. Cervical Four Post Appliance functions.
7. What is Spina Bifida?
8. Thoracic Band Alignment and Location.
9. Shoulder Girdle.
10. What is Sternal Pad?

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[LL 0817] AUGUST 2017 **Sub. Code :2442**

B.Sc. PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about Boston brace for different level curvature of scoliosis.
2. Write about biomechanics of spine.
3. Explain about HALO brace parts and functions.

II. Write notes on: **(8 x 5 = 40)**

1. Negative effects of spinal orthosis.
2. What is SOMI brace? Explain.
3. Write about Sagittal and coronal control lumbosacral orthosis.
4. Functions and trim lines of pelvic girdle in Milwaukee brace.
5. Explain about cob's angle and Ferguson's method.
6. Explain about Jewett TLSO brace.
7. Biomechanics of Milwaukee Brace.
8. Explain about C and S curve.

III. Short answers on: **(10 x 3 = 30)**

1. What is spinal realignment?
2. What is Laminectomy?
3. What is discectomy**?**
4. What is the placement and function of thoracic pad?
5. Indication for William lumbosacral brace.
6. What is Torticollis?
7. Functions of poster orthosis.
8. Functions of vertebral column.
9. Curvature of spine.
10. Contraindication of soft cervical orthosis.

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[LN 0818] AUGUST 2018 **Sub. Code: 2442**

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about scoliosis and orthotic treatment methods.
2. Prescription criteria of spinal orthosis.
3. Explain different types of TLSO brace.

II. Write notes on: **(8 x 5 = 40)**

1. Draw sketch of a Typical Vertebrae and mention its parts.
2. How to measure Cobb's Angle?
3. Milwaukee Brace Parts and functions.
4. Spinal Orthosis checkout Procedure.
5. Explain about intervertebral disc.
6. Write about poster orthosis.
7. Biomechanical functions of spinal orthosis.
8. Explain about Philadelphia collar.

III. Short answers on: **(10 x 3 = 30)**

1. Pelvic band.
2. What is kinesthetic reminder?
3. What is lordosis?
4. What is spondylosis?
5. What is SOMI?
6. Contraindications of Philadelphia collar.
7. What are the positive effects of spinal orthosis?
8. Contraindication of Boston brace.
9. What is the function of trochanteric pad?
10. What is abdominal corset?

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[LO 0219] FEBRUARY 2019 **Sub. Code: 2442**

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Boston brace and its biomechanics.
2. Explain about Milwaukee brace.
3. Biomechanics principle of spinal orthosis.

II. Write notes on: **(8 x 5 = 40)**

1. Explain the importance of intra-cavity pressure.
2. Types of collar.
3. HALO.
4. Function and biomechanical effect of oblique bar in Williams brace.
5. Tayler knight brace.
6. Kyphotic corrective brace.
7. Explain about posters.
8. Lumbo sacral orthosis and its biomechanics.

III. Short answers on: **(10 x 3 = 30)**

1. Pelvic girdle function.
2. Para spinal bar.
3. Para podium.
4. Thoracic vertebrae.
5. Inter vertebral disk.
6. Pelvic traction.
7. Potts spine.
8. CASH brace.
9. RGO and HGO.
10. Cobb's angle.

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[LP 0819] AUGUST 2019 **Sub. Code: 2442**

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about CTLSO.
2. Charleston bending brace and its biomechanics function.
3. Cheneau brace.

II. Write notes on: **(8 x 5 = 40)**

1. Brace for compression fracture of lumber spine.
2. Rigid braces for lower back pain.
3. Cow horn brace.
4. Brace for scoliotic curve at T6.
5. Inter vertebral disc function.
6. Two and four posters.
7. Jewett brace.
8. Check out procedure of CTLSO.

III. Short answers on: **(10 x 3 = 30)**

1. Spondylolisthesis.
2. Biomechanics of LS corset.
3. Knight brace.
4. Soft collar.
5. Lumbo sacral spine.
6. Neck traction.
7. Chair back orthosis.
8. Coccyx pillow.
9. Swivel walker.
10. Primary curve and secondary curve.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LR 2442] DECEMBER 2020 Sub. Code: 2442

(AUGUST 2020 EXAM SESSION)

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR – (Regulation from 2012 – 2013)

PAPER II – ORTHOTIC SCIENCE – IV

Q.P. Code: 802442

Time: Three Hours **Maximum : 100 Marks**

Answer All Questions

I. Elaborate on: **(3 x 10 = 30)**

1. Biomechanics of Spine.
2. Explain Reciprocating Gait Orthosis.
3. Dennis classification of Fracture.

II. Write notes on: **(8 x 5 = 40)**

1. Orthotic management for Lumbar Spodylolisthesis. Explain.
2. Pelvic Traction and its uses.
3. Biomechanics of Intervertebral Disc.
4. Weight relieving Orthosis.
5. Whiplash fracture and its Orthotic Management.
6. Name different types of TLSO and explain any One type of TLSO.
7. Check out procedure for Thoracic Lumbosacral Brace.
8. Biomechanics of Lumbo Sacral brace.

III. Short answers on: **(10 x 3 = 30)**

1. Ortho Prosthesis.
2. Principles of Fracture Bracing.
3. Chance Fracture.
4. What is Sternal Pad?
5. Soft Cervical Collar measurement.
6. Torticollis.
7. Righting Reflex.
8. Silicon Prosthesis.
9. Function of shoulder support in Milwaukee Brace.
10. Three post collar.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0122] JANUARY 2022 Sub. Code: 2442
(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

BACHELOR IN PROSTHETICS AND ORTHOTICS
FOURTH YEAR – (Regulation 2012 – 2013)
PAPER II – ORTHOTIC SCIENCE – IV
Q.P. Code: 802442

Time: Three Hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. Milwaukee brace.
2. Biomechanics of Boston brace.
3. Orthotic management of kyphosis.

II. Write notes on: **(8 x 5 = 40)**

1. Knight Taylors brace.
2. Lumbosacral extension control orthosis.
3. Halo brace.
4. Cowhorn orthosis.
5. Biomechanics of corset.
6. SOMI brace.
7. Four poster orthosis.
8. Hard collar.

III. Short answers on: **(10 x 3 = 30)**

1. Importance of traction in spinal orthotics.
2. Soft collar.
3. Philadelphia collar.
4. Scoliosis.
5. Lordosis.
6. Parapodium.
7. Motions of spine.
8. Advantages and disadvantage of silicone prosthesis.
9. Corrective force for double curve in scoliosis.
10. Jewett brace.

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